

1600

RAW SEQUENCE LISTING DATE: 09/15/2003 PATENT APPLICATION: US/09/964,858A TIME: 15:33:45

Input Set : A:\sequencelisting\_09-964,858.txt
Output Set: N:\CRF4\09152003\1964858A.raw

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3 <110> APPLICANT: HOSTETTER, Margaret K.
        DEVORE-CARTER, Denise
 6 <120> TITLE OF INVENTION: ANTIBODIES TO THE PROPEPTIDE OF CANDIDA ALBICANS
 8 <130> FILE REFERENCE: P07274US02/BAS
10 <140> CURRENT APPLICATION NUMBER: US 09/964,858A
11 <141> CURRENT FILING DATE: 2001-09-28
13 <150> PRIOR APPLICATION NUMBER: US 60/237,082
14 <151> PRIOR FILING DATE: 2000-09-28
16 <160> NUMBER OF SEQ ID NOS: 8
18 <170> SOFTWARE: PatentIn version 3.1
                                                        ENTERED
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21 <211> LENGTH: 1664
22 <212> TYPE: PRT
23 <213> ORGANISM: Candida albicans
25 <400> SEQUENCE: 1
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35 Thr Lys Pro Leu Asn Phe Pro Arg Thr Asn Ser Lys Pro Ser Leu Asp
                             40
39 Pro Asn Ser Ser Ser Asp Thr Tyr Thr Ser Glu Gln Asp Gln Glu Lys
                         55
43 Gly Lys Glu Glu Lys Lys Asp Thr Ala Phe Gln Thr Ser Phe Asp Arg
                      70
                                         75
47 Asn Phe Asp Leu Asp Asn Ser Ile Asp Ile Gln Gln Thr Ile Gln His
                 85
                                     90
51 Gln Gln Gln Gln Gln Gln Gln Gln Leu Ser Gln Thr Asp Asn
              100
                                 105
55 Asn Leu Ile Asp Glu Phe Ser Phe Gln Thr Pro Met Thr Ser Thr Leu
56 115 · 120
59 Asp Leu Thr Lys Gln Asn Pro Thr Val Asp Lys Val Asn Glu Asn His
                          135
63 Ala Pro Thr Tyr Ile Asn Thr Ser Pro Asn Lys Ser Ile Met Lys Lys
                      1.50
                                         155
67 Ala Thr Pro Lys Ala Ser Pro Lys Lys Val Ala Phe Thr Val Thr Asn
                                     170
                  165
71 Pro Glu Ile His His Tyr Pro Asp Asn Arg Val Glu Glu Glu Asp Gln
              180
                                  185
75 Ser Gln Gln Lys Glu Asp Ser Val Glu Pro Pro Leu Ile Gln His Gln
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                                                 205
79 Trp Lys Asp Pro Ser Gln Phe Asn Tyr Ser Asp Glu Asp Thr Asn Ala
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83	Sar	Val	Dro	Dro	Thr	Dro	Dro	LOU	Hic	Thr	Thr	Lys	Dro	Thr	Dho	ΔΙα
84		vaı	rio	FIU		230	LLO	пец	1113	1111	235	цуз	£10	1111	rne	240
		T.e.11	T.e.ii	Δsn			Δsn	Glu	Val	Asn		Glu	Pro	Glu	Δla	
88	· · · · ·		Dea	71011	245	11011		014		250	001	OLU		Olu	255	200
	Thr	Asp	Met	Lvs		Lvs	Ara	Glu	Asn		Ser	Asn	Leu	Ser		Asp
92		ı.op		260	ДСИ	טעם	9	014	265	1110	501	11011	шси	270	Dou	пор
-	Glu	Lvs	Val		Len	Tvr	Leu	Ser		Thr	Asn	Asn	Asn		Ser	Lvs
96			275			- 1 -		280					285			-1-
	Asn	Val		Asp	Met	Asp	Ser		Leu	Gln	Asn	Leu		Asp	Ala	Ser
100		290		<u>-</u> -		F-	295					300				
	Lvs			Thr	Asn	Glu			e His	s Asr	Let			Ala	Leu	Lys
	305		2			310					315					320
107	Ala	Pro	Lys	Asn	Asp	Ile	Glu	ı Asr	n Pro	Lev	ı Asr	Ser	Let	ı Thr	Asn	Ala
108			-		325					330					335	
111	Asp	Ile	Ser	Leu	Arg	Ser	Ser	Gly	/ Ser	Ser	Glr	Ser	Ser	Leu	Gln	Ser
112				340					345	5 .	•			350	)	
115	Leu	Arg	Asn	Asp	Asn	Arg	Val	. Le	ı Glu	ı Ser	. Val	. Pro	Gly	/ Ser	Pro	Lys
116			355	ı				360	)				365	)		
119	Lys	Val	Asn	Pro	Gly	Leu	Ser	Leu	ı Asr	ı Asp	Gly	, Ile	Lys	Gly	<sup>7</sup> Phe	Ser
120		370	1				375	•				380	l			
123	Asp	Glu	Val	Val	Glu	Ser	Let	Lei	ı Pro	Arg	, Asp	Leu	Ser	Arg	Asp	Lys
	385					390					395					400
127	Leu	Glu	Thr	Thr	Lys	Glu	His	Asp	Ala	a Pro	Glu	ı His	Asr	Asn	Glu	Asn
128					405					410					415	
131	Phe	Ile	Asp		_	Ser	Thr	Asr	n Thr	Asn	ı Lys	Gly	Glr	Leu	Leu	Val
132				420					425					430		_
	Ser	Ser		_	His	Leu	Asp			e Asp	Arg	Ser			His	Thr
136			435			_	_	440		_		_	445			
	Glu			Ile	Leu	Asn			ı Asr	ı Ser	Ala			Ser	Gln	Ile
140	_	450		70.7	τ.	0.1	455		~	<b>61</b>	m1	460		0.1	0.1	<b>61</b>
		ьeu	Asn	Ата	Leu			GIT	ı Arç	g Gin			GIU	i Gin	ı GIU	Gln
	465	C1-	71.	7.1.	C1	470		C1.	. (1.	. mh.	475		Cox	. 70	700	480
147 148	Thr	GIN	Ата	Ата	485		GIU	GI	1 GIU	490		Phe	ser	ASP	495	Ile
	Tvc	W-1	T +/-	Cln			T 170	COR	· 7\cr			Dho	. 1/- 1	Tuc		Thr
152	ъйг	val	ьус	500		FIO	гу	261	505		GIU	rne	· val	. Буз 510		1111
	ΤlΔ	Luc	T.ve			V = 1	Sar	· 10.1 =			Tle	Luc	Δla			Arg
156	116	шуз	515		110	Val	261	520		. GIU	. 110	. Llys	525		иys	mg
	Glu	Phe			Ara	T۱۵	T.e.11			J.V.S	Δsr	Glu			Tle	Ala
160	Olu	530		DCI	711.9	110	535	_	, 110	י בעני	1101	540	-	, 010	. 110	112.0
	Glu			Asn	Tle	His			Lvs	Glu	Asn			Asn	Ser	His
	545			1101		550		27.0	, 11,0	, 010	555					560
		Glu	Asp	Thr	Asp			Lei	ı Tıvs	Lvs			Asn	Asc	Asp	Glu
168					565				1-	. 570					575	
	Glu	Ser	Asp	Thr			Asn	Ser	Thr			Ser	Ile	Ara		His
172		<b>-</b>		580					585					590		
	Ile	Asp	Ser			Lys	Leu	Glu			Asn	Asp	Glv			Glu
176		r	595			_		600				L	605		,	
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18	0	610					615					620				
18	3 Val	Ser	Gln	Thr	Ser	Asp	Ile	Ile	Gly	Asp	Lys	Tyr	Gly	Asn	Ser	Ser
18	4 625					630					635					640
18	7 Ser	Glu	Ile	Thr	Thr	Lys	Thr	Leu	Ala	Pro	Pro	Arg	Ser	Asp	Asn	Asn
18	8				645					650					655	
19	1 Asp	·Lys	Glu	Asn	Ser	Lys	Ser	Leu	Glu	Asp	Pro	Ala	Asn	Asn	Glu	Ser
19	2			660					665					670		
19	5 Leu	Gln	Gln	Gln	Leu	Glu	Val	Pro	His	Thr	Lys	Glu	Asp	Asp	Ser	Ile
19	6		675					680					685			
19	9 Leu	Ala	Asn	·Ser	Ser	Asn	Ile	Ala	Pro	Pro	Glu	Glu	Leu	Thr	Leu	Pro
20	0	690					695					700				
20	3 Val	Val	Glu	Ala	Asn	Asp	Tyr	Ser	Ser	Phe	Asn	Asp	Val	Thr	Lys	Thr
	4 705					710					715					720
20	7 Phe	Asp	Ala	Tyr	Ser	Ser	Phe	Glu	Glu	Ser	Leu	Ser	Arg	Glu	His	Glu
20					725					730					735	
	1 Thr	Asp	Ser	_	Prò	Ile	Asn	Phe		Ser	Ile	Trp	His	_	Gln	Glu
21				740					745					750		
	5 Lys	Gln	_	Lys	His	Gln	Ile		Lys	Val	Pro	Thr	-	Gln	Ile	Ile
21		_	755	~ 3	~ .	_	_	760	~ 1		~ 1	_	765			_
	9 Ala		Tyr	GIn	GIn	Tyr	_	Asn	GLu	GIn	GLu		Arg	Val	Thr	Ser
22		770	77 - 7	<b>T</b>	<b>-1</b> .	Б	775	7.7.	<b>T1</b> .	<b>61</b> .	D1	780	<b>.</b>	<b>D</b> 1	<b>.</b>	<b>6</b> 1
	3 Asp	ьys	vaı	ьуѕ	ire		ASI	Ата	тте	GIN		гàг	гÀг	Pne	ьys	
	4 785 7 Val	700	Wa I	Mot	C02	790	7 ~ ~	17-1	Wa 1	Cor	795	7 00	Mot	7 00	7\ 0.50	800
22		ASII	vai	Met	805	Arg	Arg	vai	vai	810	FIO	изр	Met	АЗР	815	ьeu
	1 Asn	Val	Ser	Gln		T.e.11	Pro	Glu	T.e.13		Glu	Asn	Ser	Glv		T.ve
23		Vul	DCI	820	1110	пса	110	Oiu	825	OCL	OLU	1101	DCI	830	1110	БУЗ
	5 Asp	Leu	Asn		Ala	Asn	Tvr	Ser		Asn	Thr	Asn	Ara		Ara	Ser
23			835				- 1 -	840					845		9	
23	9 Phe	Thr	Pro	Leu	Ser	Thr	Lys	Asn	Val	Leu	Ser	Asn	Ile	Asp	Asn	Asp
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24	4 865					870					875	_				880
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	1 Pro	Leu	Pro	Pro	Gln	Arg	Gln	Pro	Ser	Ser	Thr	Arg	Ser	·Asn	Ser	Asn
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	5 Lys	Arg		Ser	Arg	Phe	Arg		Pro	Thr	Phe			Arg	Arg	Thr
25			915					920					925			
	9 Ser		Ala	Leu	Ala	Pro	-	Asp	Met	Tyr	Asn		Ile	Phe	Asp	Asp
26		930		~1	_	_	935	<b></b> \		_		940			_	
	3 Phe	GLY	Ala	GLY	Ser		Pro	Thr	Пе	Lys		GLu	GLA	Met	ьуs	
	4 945	D	<b>a</b>	M	<b>D</b>	950		70	17. 1		955	<b>~1</b> .	<b>T</b>		70.7	960
	7 Leu	Pro	ser	мет		ràs	Asp	Asp	var		Arg	тте	Leu	ASII		ьys
26		C1	t/_ 1	mb ~	965	7.00	C1	т	т1.	970	7.1.	T	T 011	Wal	975	C1 -
27	1 Lys	сту	val	980	GTII	Asp	GIU	TAT	985	HSII	ATG	пуз	ьеи	990	Asp	GTII
		Pro	T.ve		Aen	Ser	Tla	۷a٦		· Acr	Pro	. G1,	ı Acr		ኅ ጥ፣	r Glu
27	_	110	995	шуз	ASII	DGI	TTC	1000		. Ast	, ET(	, 916	100		. y . 1	, L GIU
ر ح	•							1000	,				100	, ,		

## RAW SEQUENCE LISTING DATE: 09/15/2003 PATENT APPLICATION: US/09/964,858A TIME: 15:33:45

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279 Glu Leu Gln Gln Thr Ala Ser Ile His Asn Ala Thr Ile Asp Ser 283 Ser Ile Tyr Gly Arg Pro Asp Ser Ile Ser Thr Asp Met Leu Pro 287 Tyr Leu Ser Asp Glu Leu Lys Lys Pro Pro Thr Ala Leu Leu Ser 291 Ala Asp Arg Leu Phe Met Glu Glu Val His Pro Leu Arg Ser 295 Asn Ser Val Leu Val His Pro Gly Ala Gly Ala Ala Thr Asn Ser 299 Ser Met Leu Pro Glu Pro Asp Phe Glu Leu Ile Asn Ser Pro Ala 303 Arg Asn Val Ser Asn Asn Ser Asp Asn Val Ala Ile Ser Gly Asn . 1105 307 Ala Ser Thr Ile Ser Phe Asn Gln Leu Asp Met Asn Phe Asp Asp 311 Gln Ala Thr Ile Gly Gln Lys Ile Gln Glu Gln Pro Ala Ser Lys 315 Ser Ala Asn Thr Val Arg Gly Asp Asp Asp Gly Leu Ala Ser Ala 319 Pro Glu Thr Pro Arg Thr Pro Thr Lys Lys Glu Ser Ile Ser Ser 323 Lys Pro Ala Lys Leu Ser Ser Ala Ser Pro Arg Lys Ser Pro Ile 327 Lys Ile Gly Ser Pro Val Arg Val Ile Lys Lys Asn Gly Ser Ile 331 Ala Gly Ile Glu Pro Ile Pro Lys Ala Thr His Lys Pro Lys Lys 335 Ser Phe Gln Gly Asn Glu Ile Ser Asn His Lys Val Arg Asp Gly 339 Gly Ile Ser Pro Ser Ser Gly Ser Glu His Gln Gln His Asn Pro 343 Ser Met Val Ser Val Pro Ser Gln Tyr Thr Asp Ala Thr Ser Thr 347 Val Pro Asp Glu Asn Lys Asp Val Gln His Lys Pro Arg Glu Lys 351 Gln Lys Gln Lys His His His Arg His His His His His Lys 355 Gln Lys Thr Asp Ile Pro Gly Val Val Asp Asp Glu Ile Pro Asp 359 Val Gly Leu Gln Glu Arg Gly Lys Leu Phe Phe Arg Val Leu Gly 363 Ile Lys Asn Ile Asn Leu Pro Asp Ile Asn Thr His Lys Gly Arg 

367 Phe Thr Leu Thr Leu Asp Asn Gly Val His Cys Val Thr Thr Pro

371 Glu Tyr Asn Met Asp Asp His Asn Val Ala Ile Gly Lys Glu Phe 

375 Glu Leu Thr Val Ala Asp Ser Leu Glu Phe Ile Leu Thr Leu Lys

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384	-	1400			-		1405		_			1410			-		
387	Ser	Lvs	Asp	Ile	Ile	Thr	Thr	Thr	Lys	Phe	Val	Pro	Thr	Glu	Val		
388		1415	_				1420		-			1425			·		
	Lvs	Asp	Thr	Trp	Ala	Asn	Lys	Phe-	Ala	Pro	Asp	Glv	Ser	Phe	Ala		
392	_	1430					1435				-	1440					
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	Lys			Gln	Phe	Asp	Leu	Asn	Cys	Phe	Asn	Glu	Trp	Glu	Thr		
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404		1475		-			1480		-	,	-	1485		-	-		
407	Ile	Ala	Gln	Leu	Glu	Val	Lys	Met	Leu	Tyr	Val	Pro	Arg	Ser	Asp		
408		1490					1495			-	•	1500	_		-		
411	Pro	Arg	Glu	Ile	Leu	Pro	Thr	Ser	Ile	Arg	Ser	Ala	Tyr	Glu	Ser		
412		1505					1510			_		1515	-				
415	Ile	Asn	Glu	Leu	Asn	Asn	Glu	Gln	Asn	Asn	Tyr	Phe	Glu	Gly	Tyr		
416		1520					1525				_	1530		_	_		
419	Leu	His	Gln	Glu	Gly	Gly	Asp	Cys	Pro	Ile	Phe	Lys	Lys	Arg	Phe		
420		1535			_	_	1540	_				1545	_				
423	Phe	Lys	Leu	Met	Gly	Thr	Ser	Leu	Leu	Ala	His	Ser	Glu	Ile	Ser		
424		1550					1555					1560					
427	His	Lys	Thr	Arg	Ala	Lys	Ile	Asn	Leu	Ser	Lys	Val	Val	Asp	Leu		
428		1565					1570					1575					
431	Ile	Tyr	Val	Asp	Lys	Glu	Asn	Ile	Asp	Arg	Ser	Asn	His	Arg	Asn		
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435	Phe	Ser	Asp	Val	Leu	Leu	Leu	Asp	His	Ala	Phe	Lys	Ile	Lys	Phe		
436		1595					1600					1605					
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	Arg		Arg	Arg	Gln	Pro	Trp	Val	Asn	Leu	Met		Gln	Gln	Gln		
448		1640					1645		_			1650				•	
	Gln		Gln	Gln	Gln	Gln	Gln	Ser	Ser	Gln	Gln						
452		1655			_		1660										
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															gaaactt		60
															ccaagt		120
															tcggca		180
															gccgagt		240
469	ctag	jatcca	aa at	.ccaa	igcto	: tga	icacct	.ac a	ccac	gegaa	ac aa	igatea	aga	gaaa	igggaaa		300

VERIFICATION SUMMARY

DATE: 09/15/2003

PATENT APPLICATION: US/09/964,858A . TIME: 15:33:46

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